



## **NCBI Conserved Domain Summary**

Taxonomy Structure PubMed Nucleotide Protein Query= gi|2315863|gb|AAC51660.1| apoptosis inhibitor survivin [Homo sapiens] (142 letters) Database: cdd.v.1.62 Click on boxes for multiple alignments B-criled-Show Details Show Domain Relatives Show Domains in Entrez Help | Disclaimer | Write to the Help Desk NCBI | NLM | NIH SEQ ID NO: 4, usential residua 65-74 of SEO ID NO: 39

BIR : Baculovinus Inhibitor of applies & Referen



## **NCBI Conserved Domain Summary**

PubMed Nucleotide Protein Structure Taxonomy

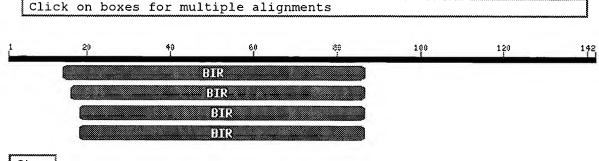
RPS-BLAST 2.2.6 [Apr-09-2003]

Query= gi|2315863|gb|AAC51660.1| apoptosis inhibitor survivin
[Homo sapiens]

(142 letters)

Database: #cdd.v1.62

11,088 PSSMs; 2,717,223 total columns



Show Domain Relatives

This CD alignment includes 3D structure. To display structure, download <u>Cn3D!</u>

PSSMs producing significant alignments:

Score E (bits) value

gnl|CDD|14931 smart00238, BIR, Baculoviral inhibition of apoptosis protein r... 89.6 1e-19

and CDD 17763 cd00022, BIR, Baculoviral inhibition of apoptosis protein repe... 84.2 5e-18

■ gnl|CDD|3661 LOAD\_bir, BIR, Zn binding domain involved in protein protein i... 79.2 2e-16 gnl|CDD|1211 pfam00653, BIR, Inhibitor of Apoptosis domain. BIR stands for ... 78.4 3e-16

gnl|CDD|14931, smart00238, BIR, Baculoviral inhibition of apoptosis protein repeat; Domain found in inhibitor of apoptosis proteins (IAPs) and other proteins. Acts as a direct inhibitor of caspase enzymes.

CD-Length = 72 residues, 95.8% aligned Score = 89.6 bits (222), Expect = 1e-19

Query: 14 LKDHRISTFKNWPFLEGCACTPERMAEAGFIHCPTENEPDLAQCFFCFKELEGWEPDDDP 73 Sbjct: 2 SEEARLKTFQNWPYNS--KLTPEKLAKAGFYYTGV---GDEVKCFFCGGELDNWEPGDDP 56

Query: 74 IEEHKKHSSGCAFL 87 Sbjct: 57 WEEHKKWSPNCPFV 70



gnl|CDD|17763, cd00022, BIR, Baculoviral inhibition of apoptosis protein repeat domain; Found in inhibitors of apoptosis proteins (IAPs) and other proteins. In higher eukaryotes, BIR domains inhibit apoptosis by acting as direct inhibitors of the caspase family of protease enzymes. In yeast, BIR domains are involved in regulating cytokinesis. This novel fold is stabilized by zinc tetrahedrally coordinated by one histidine and three cysteine residues and resembles a classical zinc finger.

```
CD-Length = 69 residues, 97.1% aligned Score = 84.2 bits (208), Expect = 5e-18
```

Query: 16 DHRISTFKNWPFLEGCACTPERMAEAGFIHCPTENEPDLAQCFFCFKELEGWEPDDDPIE 75 Sbjct: 1 EARLKTFKNWPI--SLKVTPEKLAEAGFYYT---GRGDEVKCFFCGLELKNWEPGDDPWE 55

Query: 76 EHKKHSSGCAFL 87 Sbjct: 56 EHKRWSPNCPFV 67

gnl|CDD|3661, LOAD\_bir, BIR, Zn binding domain involved in protein protein interactions in caspase inhibition and spindle assembly.

```
CD-Length = 65 residues, 100.0% aligned Score = 79.2 bits (195), Expect = 2e-16
```

Query: 18 RISTFKNWPFLEGCACTPERMAEAGFIHCPTENEPDLAQCFFCFKELEGWEPDDDPIEEH 77 Sbjct: 1 RLKTFQNWPA--SLNVLPEKLARAGFYYTGR---GDEVRCFFCGGVLKNWEPGDDPWEEH 55

Query: 78 KKHSSGCAFL 87 Sbjct: 56 ARWSPNCPFV 65

gnl|CDD|1211, pfam00653, BIR, Inhibitor of Apoptosis domain. BIR stands for 'Baculovirus Inhibitor of apoptosis protein Repeat' Also known as IAP repeat.

```
CD-Length = 66 residues, 98.5% aligned
Score = 78.4 bits (193), Expect = 3e-16
```

Query: 18 RISTFKNWPFLEGCACTPERMAEAGFIHCPTENEPDLAQCFFCFKELEGWEPDDDPIEEH 77 Sbjct: 1 RLRTFQNWPI--SNLQFPEQLAKAGFYYTGVGDEV---RCFFCGVELKNWEPGDDPWEEH 55

Query: 78 KKHSSGCAFL 87 Sbjct: 56 KRWSPNCPFV 65

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